Journal of Sustainable Development; Vol. 6, No. 8; 2013
ISSN 1913-9063 E-ISSN 1913-9071
Published by Canadian Center of Science and Education

Stock Market Performance and Sustainable Economic Growth in Nigeria: A Bounds Testing Co-integration Approach

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Received: May 4, 2013 Accepted: July 6, 2013 Online Published: July 17, 2013

doi:10.5539/jsd.v6n8p84 URL: http://dx.doi.org/10.5539/jsd.v6n8p84

Abstract

The study examined the relationship between stock market performance and economic growth in Nigeria. It utilized the bounds testing co-integration procedure also known as autoregressive distributed lag estimation procedure. The empirical model combined key stock market indicators and some traditional macroeconomic variables to estimate the hypothesized relationship in the study. It found that in the long-run, overall output in the Nigerian economy is less sensitive to changes in stock market capitalization as well as the average dividend yield thereby casting doubt on the ability of the Nigerian stock market in its present level of development to serve as a barometer for measuring or predicting the overall health of the Nigerian economy as well as its direction over the long-run horizon. The other major finding in the study is that the long-run growth of the Nigerian economy is highly sensitive to marginal variations in interest rate which is suggestive that macroeconomic variables in the country are at present more useful in shaping the long-run direction of the Nigerian economy.

Keywords: stock market performance, economic growth, bounds testing Co=integration

1. Introduction

The stock market provides equity and a direct form of finance to potential investors for economic purposes. This role enables it to function as a critical long-term lubricant in the economic growth process. The performance of the stock market is in addition often considered an essential or good barometer for measuring a country's economic strength and development. Thus, an economy with an active stock market may have its vital stock market index regularly used as a guide in the measurement of changes in the general level of economic activities within the concerned economy. One other major role of the stock market as an economic institution is that it enhances the efficiency of capital formation and allocation of resources. It is therefore expected that every active stock market will facilitate the availability of long-term capital for economically productive activities and this remains a key requirement for economic growth and development.

The stock market also provides a means by which the capital needed for efficient or effective growth in the economy is made available. Stock markets are in addition regarded as a necessary tool for economic growth and development as they provide listed companies the platform to mobilize much needed capital for the long-term investment needs of businesses. This also encourages surplus spending economic agents to save thereby increasing the saving rate as well as directly stimulating more investments and consequently bringing additional investment income to the owners of funds.

Goldsmith (1969), McKinnon and Shaw (1973) suggest that there is indeed a linkage between the capital market performance and growth in the economy. Recently a lot of importance has been attached to the importance of stock exchange market in Nigeria. The debate and arguments on the exact role of the Capital markets on economic growth is ongoing and so far, a number of studies have shown conflicting results (Oyejide, 1994; Nyong, 1997; Obadan, 1998; Sule & Momoh, 2009; Ewah, Esang, & Bassey, 2009). While some are of the opinion that a negative link exists between Capital markets on economic growth, others argue that there exists a positive link. In any case, stock market will contribute to economic growth in a sustained manner if the right political climate exists. The issues of macroeconomic stability, adequate education of the public on the benefits of stock markets on the growth and development of a country's economy, the necessity of minimizing sharp practices of market operators, etc are all germane to the full realization of the benefits of the stock market in any given economy.

The stock market in most economies plays a central role in the economic growth progress. There has been a relatively impressive growth record of the Nigerian economy in recent times. Surprisingly, the impressive growth record of the Nigerian economy has been accompanied by a low profile of activities in the Nigerian stock market adduced mainly to the global economic crisis. These realities appear a considerable contradiction and expectedly compel a number of questions on grounds of intellectual curiosity. Are there significant long-run role for the stock market in the economic growth process of Nigeria? How do we characterize the long-run dynamics (if they exist) of the key variables in this relationship? This study is of course motivated by the facts that equity enjoys perpetual life and the need to empirically establish the existence of a linkage between the stock market performance and long-run economic growth in Nigeria.

In what follows, the related literature is reviewed in section two of the paper while section three addresses issues of data and methodology. Section four of the paper deals with empirical results and discussions of findings. We provide some general concluding remarks in section five of the paper.

2. Literature Review

Levine (1997) categorizes the functions of a financial system into five basic tasks. The first is that financial systems facilitate diversification, trading, pooling of risk and hedging. Secondly, financial systems allocate resources. Thirdly, financial system implements corporate control and monitors managers. The fourth is that financial systems mobilize savings. Lastly, financial systems facilitate exchange of goods and services. These functions are no doubt economic growth inducing. There are two broad schools of thought that are currently involved in a running debate on the exact channels through which financial development induces economic growth (Gupta, 1984). These are the structuralists and the repressionist. The structuralists (Gurley & Shaw, 1955; Goldsmith, 1969; etc) believe that the quantity and composition of financial variables induce economic growth via a direct increase in savings in the form of financial assets. The implication of this is that it encourages capital formation and finally, economic growth. Some important factors responsible for economic growth include financial deepening and the composition of aggregate financial variables. Levine and Zervos (1998), found that stock market liquidity and banking development had a positive impact on the growth of the economy, after controlling for factors such as, openness to trade, fiscal policy, political stability and education.

Shaw (1973) and McKinnon (1973), both of the financial repressionist school, developed a hypothesis called the McKinnon-Shaw hypothesis. The hypothesis contends that financial liberalization is a vehicle of promoting economic growth as long as it allows for an appropriate rate of return on real cash balances. The implication of this is that a negative or low real interest rate discourages savings. If this hypothesis turns out true, available loanable funds for investment will be significantly reduced and this will lead to lower economic growth. Ahmed and Ansari (1995) used price variables as the relevant financial factors for growth in Bangladesh and found weak evidence in support of the McKinnon-Shaw hypothesis. However, Khan and Hasan (1998) in a study for Pakistan found strong support for the "McKinnon-Shaw" hypothesis. An important point worthy of note is the similarity between the structuralists and the repressionists which bothers on the efficient utilization of resources in the pursuit of an economic growth agenda.

There is mixed evidence within the literature supporting either a positive or negative link between stock market performance and economic growth. For example, Atje and Jovanovic (1993) found a significant correlation between average economic growth and stock market capitalization. Similarly, Levine and Zervos (1996) discovered a strong empirical relationship linking long-run economic growth to stock market development. Seyyed (2010) presented a systematic investigation of the relationship between stock markets performance and economic growth using the Vector Autoregressive (VAR) model and found that macroeconomic activity significantly explained the movement of stock prices in the long run. Nurudeen (2009) found results indicating that stock market development increased economic growth in Nigeria. Similarly, Vazakidis and Adamopoulos (2009) confirmed in their causality study on France that economic growth causes stock market development in France, and also obtained results supporting a positive effect of economic growth on stock market. On the contrary, Nyong (1997) found that capital market development is negatively and significantly correlated with the long-run growth of the economy in Nigeria. Ewah et al. (2009) did not find evidence to support the view that capital market has contributed meaningfully to the economic growth of Nigeria, but they noted that capital market has the potential to be growth inducing in the Nigerian economy. These conflicting results on the role of the stock market on the long-run growth of the Nigerian economy provide a justification for this study which utilizes a different technique from the earlier studies on Nigeria to analyze the relationship.

Tobias and Danson (2011) believe that the fundamental driving forces of growth and the great variations in cross country economic performance over time are yet to be satisfactorily explained by growth economists.

Sudharshan and Rakesh (2011) emphasized the importance of stock markets in explaining the growth process in both developed and developing economies of the world. They pointed out that the research focus has now shifted to identifying the cause and effect relationship between stock market development and economic growth over the last few decades. The observed phenomenal growth of the emerging stock markets since the late 1980s in terms of market capitalization, listed companies and shareholders has been considered a significant development by some scholars. For example, El-Wassal (2005) noted that whereas the emerging stock markets capitalization has increased 32 times, the capitalization of the developed stock markets has increased 11 times between 1980 and 2000. This is indicative of the expansion rate of emerging stock markets capitalization in recent years and triggers greater interest in understanding the role of these emerging stock markets in explaining the growth process of the concerned economies.

The capital market played a significant role in the privatization of public owned enterprises in Nigeria. The recent re-capitalization of the banking sector also provided the capital market the opportunity to raise long term funds for the banks in Nigeria. There is clear evidence that the capital market remains an important source of capital for the nation's economic development in financing infrastructural projects, the privatization programme of the government and banking sector recapitalization in Nigeria. Sule and Momoh (2009) conclude that the recent bank consolidation exercise and the privatization exercise of most publicly owned enterprises are key indications of government faith in the capital market to drive growth of the Nigerian economy. The Nigerian capital market has no doubt witnessed some relative stability and also recorded impressive growth over the years. This has positioned it to positively impact the economy. However, it remains to be satisfactorily verified whether the long term funds regularly mobilized by the Nigerian capital market has made significant impact in a sustainable manner on the economic growth of Nigeria.

3. Methodology and Data

An econometric analysis is undertaken in this study to resolve the identified research problem. The study also makes use of secondary time-series annual data covering the period 1981 – 2011. The choice of this period is justified by data availability as series for the stock market variables employed in the study began in 1981. Empirical models are first specified to capture the hypothesized relationships in the study. These are then estimated using appropriate estimation techniques. Data analysis is accomplished using the econometric software, MICROFIT 4.1.

3.1 Model Specification

In modeling the relationship between stock market performance and economic growth in Nigeria, current period growth realization is typically thought of as being influenced by past realizations of growth itself as well as current and past realizations of key stock market indicators in the economy. To begin with, the baseline model to be estimated for this study is first specified in its functional form below.

$$GDP = f\left(MCAP, VTSEC, ADYield, INTR \quad FD\right) \tag{1}$$

Where: GDP is gross domestic product; MCAP is market capitalization; VTSEC is value of traded securities; ADYield is average dividend yield; INTR is interest rate; and FD is financial depth. Data for all variables were sourced from the Central Bank of Nigeria (CBN) Annual Statistical Bulletin (2011 edition). MCAP, VTSEC and ADYield are key stock market variables that are intended to serve as indicators or measures of stock market performance during the period covered by the study. INTR and FD are financial sector variables intended to account for the macroeconomic policy environment during the period covered by the study.

In order to obtain a more explicit and estimable linear function of Equation (1), the variables on both sides are transformed into their natural logs (L) to obtain the following:

$$LGDP = \alpha + \delta_1 LMCAP + \delta_2 LVTSEC + \delta_3 LADYield + \delta_4 LINTR + \delta_5 LFD + \varepsilon \tag{2}$$

The coefficient estimates in this case are interpreted as constant elasticities which essentially capture the sensitivity of the dependent variable to a unit variation in each of the explanatory variables. Theoretically, the LGDP is expected to be more than proportionately sensitive to marginal variations in each of the explanatory variables holding all others constant in each case.

3.2 Model Estimation Technique

The bounds testing cointegration procedure also known as autoregressive distributed lag (ARDL) estimation procedure as advanced in Pesaran and Shin (1999) and Pesaran, Shin, and Smith (1996, 2001) is employed in this study to examine the long-run relationship between Stock market performance and economic growth in Nigeria. The strength of this estimation technique has to do with its ability to handle relationships irrespective of

whether the regressors are I(0) or I(1). The ARDL technique can also avoid the pre-testing problems associated with the traditional cointegration analysis which requires the classification of the variables into I(1) and I(0).

There are two stages that are involved in the ARDL procedure. To start with, the F-statistic for testing the significance of the lagged levels of the variables in the error correction form of the underlying ARDL model is computed and this F-statistic is then used to determine the existence of a long-run relationship between the variables under investigation. There is however a problem at this stage which has to do with the non-standard nature of the asymptotic distribution of this computed F-statistic and this fact is irrespective of whether the regressors are I(0) or I(1). Interestingly, Pesaran, Shin, and Smith (1996) have tabulated the appropriate critical values for different numbers of regressors (k) which can be employed to overcome this observed difficulty. To obtain the vital F-statistic, Equation (2) is first estimated by the OLS method, the applicable variable addition test is thereafter conducted and the relevant F-statistic is obtained from the results. The applicable hypothesis at this stage is the null of non-existence of a long-run relationship defined by:

$$H_0 : \lambda_1 = \lambda_2 = \lambda_3 = \lambda_4 = \lambda_5 = 0 \qquad \text{(no long-run relationship),}$$

Against

$$H_1 : \lambda_1 \neq \lambda_2 \neq \lambda_3 \neq \lambda_4 \neq \lambda_5 \neq 0 \qquad \text{(a long-run relationship exists)}$$

The existence of a long-run relationship provides the green light to proceed with the analysis.

If there is a satisfactory long-run relationship between the variables to be estimated, that is, the relationship is not in fact spurious, then the second stage in the analysis will be to estimate the coefficients of the long-run relations and make inferences about their values. The error correction model associated with the long-run estimates may in turn be estimated to determine the stability of the long-run relationship.

This hypothesized relationship in Equation (2) is accurately captured in the generalized autoregressive distributed lag (ARDL) model of the form ARDL (p; q_1; q_2; …, q_k). Such that:

$$\delta(L,p)y_t = \sum_{i=1}^{k}\gamma_i(L_i q_i)x_{it} + \delta' w_t + u_t \tag{3}$$

Where

$$\delta(L,p) = 1 - \delta_1 L - \delta_2 L^2 - \ldots - \delta_p L^p$$
$$\gamma_i(L_i q_i) = 1 + \gamma_{i1}L + \gamma_{i2}L^2 + \ldots + \gamma_{iqi}L^{qi}, \quad fori = 1,2,\ldots,k \tag{4}$$

And, if $\boldsymbol{\delta}(L,p) = 1$, then the model does not contain any lags of y_t and Equation (1) is reduced to a distributed lag model. L is a lag operator such that $Ly_t = y_{t-1}$ and w_t is a $SX1$ vector of deterministic variables such as the intercept term, seasonal dummies or time trends, or exogenous variables with fixed lags.

If there is evidence in support of a long-run relationship or cointegration among the variables included in Equation (2), the following long-run model will be estimated:

$$LGDP_t = \alpha_1 + \sum_{i=1}^{p}\delta_{1i}LGDP_{t-i} + \sum_{i=0}^{p}\varnothing_{1i}LMCAP_{t-i} + \sum_{i=0}^{p}\beta_{1i}LVTSEC_{t-i} + \sum_{i=0}^{p}\gamma_{1i}LADYield_{t-i}$$
$$+\sum_{i=0}^{p}\theta_{1i}LINTR_{t-i} + \sum_{i=0}^{p}\pi_{1i}LFD_{t-i} + \mu_t \tag{5}$$

In view of the fact that annual data are utilized in this study, a maximum lag (p) of order 2 is selected for Equation (5) in line with Pesaran and Shin (1999).

In what follows, the ARDL specification of the short-run dynamics may be derived from the error correction representation of the form:

$$LGDP_t = \alpha_2 + \sum_{i=1}^{p}\delta_{2i}\Delta LGDP_{t-i} + \sum_{i=0}^{p}\varnothing_{2i}\Delta LMCAP_{t-i} + \sum_{i=0}^{p}\beta_{2i}\Delta LVTSEC_{t-i} + \sum_{i=0}^{p}\gamma_{2i}\Delta LADYield_{t-i}$$
$$+\sum_{i=0}^{p}\theta_{2i}\Delta LINTR_{t-i} + \sum_{i=0}^{p}\pi_{2i}\Delta LFD_{t-i} + \sigma ECM_{t-1} + \mu_t \tag{6}$$

The symbol Δ is the difference operator and the error correction tern, ECM_{t-1} in this case is defined as:

$$ECM_t = LGDP_t - \left(\begin{array}{l} \alpha_1 + \sum_{i=1}^{p}\delta_{1i}LGDP_{t-i} + \sum_{i=0}^{p}\varnothing_{1i}LMCAP_{t-i} + \sum_{i=0}^{p}\beta_{1i}LVTSEC_{t-i} \\ +\sum_{i=0}^{p}\gamma_{1i}LADYield_{t-i} + \sum_{i=0}^{p}\theta_{1i}LINTR_{t-i} + \sum_{i=0}^{p}\pi_{1i}LFD_{t-i} \end{array}\right) \tag{7}$$

All coefficients of the short-run Equation are coefficients relating to the short-run dynamics indicating the model's convergence to equilibrium following a shock to the system and the symbol σ, is the speed of adjustment parameter measuring how fast errors generated in one period are corrected in the following period.

4. Results and Discussions

A major strength of the ARDL cointegration technique is that it does not require pre-testing of variables included in the empirical model for the order of integration. However, Ouattara (2004), has clarified that in the presence of I(2) variables, the computed F-statistics of the bounds test are rendered invalid because they are based on the assumption that the variables are I(0) or I(1) or mutually cointegrated. A unit root test result would therefore provide important information to justify or serve as basis for the choice of the ARDL framework for cointegration analysis as the appropriate technique of estimation. Expectedly, results in Table 1 reveal that the variables comprise of a mix of I(0) and I(1) series thus making the ARDL technique a most suitable estimation technique of choice for this study.

Table 1. ADF unit root test for stationarity of series

Variable	**Test Statistic**		**95% critical value**		**Lag Order**	**Order of Integration**
	Level	1st Difference	Level	1st Difference		
LGDP	6.0079	0.82807	-2.9798	-2.9850	1	I(0)
LVTSEC	1.0725	-3.2357	-2.9798	-2.9850	2	I(1)
LMCAP	0.2381	-5.1213	-2.9798	-2.9850	1	I(1)
LADYIELD	-1.5858	-3.0256	-2.9798	-2.9850	2	I(1)
INTR	-2.5681	-4.9978	-2.9798	-2.9850	1	I(1)
LFD	-2.1615	-3.2944	-2.9798	-2.9850	4	I(1)

Test Assumption: Test includes an intercept but not a trend.

Source: Computed by the Authors using Microfit 4.1.

The ARDL technique to co-integration analysis as advanced by Pesaran, Shin and Smith (2001) is applicable irrespective of whether the underlying series are I(0), I(1) or a mixture of both. However the order of integration is not expected to be greater than 1. These requirements are satisfied in this study.

In what follows therefore, we proceed to test the hypothesis involving the null of non-existence of a long-run relationship among all stationary series included in Equation (2). As pointed out by Pesaran and Pesaran (2009), the ARDL procedure provides a band covering all the possible classifications of the variables into I(0) and I(1), or even a combination of both. Of major interest here is where the computed F-statistic falls. A conclusive decision can be made without any additional knowledge of whether the underlying variables are I(0) or I(1), or fractionally integrated if and only if the computed F-statistic falls outside the upper and lower bands. If the computed statistic falls within the critical value band, an inconclusive result is obtained and inference here will depend on whether the underlying variables are I(0) or I(1) which the researcher may resolve by conducting a unit roots tests on the variables.

The results reported in Table 2 reveal that the computed F-statistic for testing the joint null hypothesis that the coefficients of the level variables in the underlying ARDL model are zero (meaning there exist no long-run relationship among them) is 4.4768. This value lies above the critical upper value bounds at the 5 percent level. Thus; the test results indicate that there exists a long-run relationship between the logarithms of GDP and VTSEC, MCAP, ADYIELD, INTR as well as FD. These variables may consequently be treated as the long-run forcing variables for the explanation of LGDP.

Table 2. ARDL technique for determination of long run relationship

	*Critical Value Bounds of the F-statistic	
	Lower Bound *I*(0)	**Upper Bound *I*(1)**
1%	3.516	4.781
5%	2.649	3.805
10%	2.262	3.367
F – Statistic 4.4768 (Prob. 0.022)		

Case: Intercept and no trend.

Number of regressors (K) = 5.

* Critical Value Bounds of the F-statistic are from Pesaran, Shin, and Smith (1996).

The estimates of the long-run coefficients based on the ARDL model specified in Equation (4) are summarized in Table 3. All variables are in logarithm hence each estimated coefficient may be interpreted as measures of long-run constant elasticity. A closer look at the results reveals that the point estimates vary remarkably in terms of magnitude and the signs being of no consequence. Apart from the variables - value of traded securities (LVTSEC) and financial deepening (LFD) which failed the significance test at all traditional levels, all other explanatory variables included in the baseline empirical model are statistically significant. Precisely, market capitalization (LMCAP) is significant at the one percent level and the coefficient estimate of this variable indicate that a unit variation in the value of LMCAP will produce a less than proportionate change in the LGDP over the long-run horizon meaning that overall output in the Nigerian economy is less sensitive to changes in stock market capitalization. A similar pattern of result also holds for the variable; average dividend yield (LADYIELD) which is significant at the five percent level. These results are evidences in support of findings in two previous studies: Nyong (1997) which found that capital market development is negatively and significantly correlated with the long-run growth of the Nigerian economy and Ewan et al. (2009) which failed to find evidence to support the view that capital market has contributed meaningfully to the economic growth of Nigeria.

On the contrary, the interest rate (lINTR) variable revealed a result supporting that LGDP is highly sensitive to marginal variations in INTR at the one percent level. Expectedly, the intercept term (INPT) is highly statistically significant at the one percent level indicating that significant aggregate output will still be produced in Nigeria even in the absence of all variables included our estimated model.

Table 3. Estimates of the long-run coefficients based on ARDL model

Long-Run Coefficients			
SBC – ARDL(2,1,0,1,1,1)			
Dependent variable: LGDP	Coefficient	Standard Error	t-stat
LVTSEC	0.028596	0.10079	0.2837
LMCAP	0.67111*	0.12814	5.2375
LADYIELD	-0.78670**	0.29151	-2.698
LINTR	1.7860*	0.39749	4.4931
LFD	-0.33872	0.25057	-1.3518
INPT	8.9070*	1.5635	5.6969

*Significant at the one percent level.

**Significant at the five percent level.

Source: Computed by the Authors using Microfit 4.1.

The estimates of the error correction model associated with the long-run estimates presented above are reported in Table 4. The estimated error correction model is selected using AIC and this provides information on the short-run relationship among LGDP and LVTSEC, LMCAP, LADYIELD, LINTR, as well as LFD. These variables are reported in their (lagged) differences. Interestingly, the variables are individually statistically

significant (except for the LADYIELD) indicating that meaningful short-run impact are also exerted by these explanatory variables on LGDP. The error correction coefficient ecm(-1) has the expected negative sign and lies between the usual range of 0 and 1. Precisely, this speed of adjustment coefficient is -0.25517 suggesting that about 26 percent of errors generated in each period is automatically corrected by the system in the subsequent period.

Table 4. Error correction representation for the ARDL model

SBC – ARDL(2,1,0,1,1,1)			
Dependent variable:	dLGDP		
	Coefficient	**Standard Error**	**t-stat [Prob]**
dLGDP1	**0.20153**	**0.082529**	**2.4419[0.024]**
dLVTSEC	**0.10278**	**0.030799**	**3.3372[.003]**
dLMCAP	**0.17125**	**0.053468**	**3.2028[.004]**
dLADYIELD	**0.033390**	**.074864**	**.44601[.660]**
dLINTR	**0.21279**	**.059828**	**3.5566[.002]**
dLFD	**-0.61799**	**.083951**	**-7.3613[.000]**
dINPT	**2.2728**	**.82108**	**2.7680[.012]**
ecm(-1)	**-0.25517**	**.063063**	**-4.0463[.001]**

ecm = LGDP - 0.029LVTSEC - 0.671LMCAP + 0.787LADYIELD -1.786LINTR + 0.339LFD - 8.907INPT

R-Squared = 0.94353

R-Bar-Squared = 0.90471

S.E. of Regression = 0.054254

F-stat. F(7, 20) = 38.1930[.000]

DW-statistic = 2.4898

Source: Computed by the Authors using Microfit 4.1.

5. Conclusion

The study examined the relationship between stock market performance and economic growth in Nigeria. To achieve this, the study utilized the bounds testing cointegration procedure also known as autoregressive distributed lag (ARDL) testing and estimation procedure advanced in Pesaran, Shin, and Smith (1996) and Pesaran and Shin (1999). This method has particularly proved intuitive and quite useful in resolving the research problem identified in this study. One very important finding in this study is that in the long-run, overall output in the Nigerian economy is less sensitive to changes in stock market capitalization as well as the average dividend yield. This result casts doubt on the ability of the Nigerian stock market in its present level of development to serve as a barometer for measuring or predicting the overall health of the Nigerian economy as well as its direction over the long-run horizon. The other major finding in the study is that the long-run growth of the Nigerian economy (LRGDP) is highly sensitive to marginal variations in interest rate (INTR). This suggests that macroeconomic variables in the country are at present more useful in shaping the long-run direction of the Nigerian economy.

As a concluding remark therefore, although it remains an important source of long-term capital for the Nigeria's economic growth and development, the Nigerian stock market still requires greater development for it to function effectively as a reliable guide in the measurement of changes in the general level of economic activities within the country.

References

Ahmed, S. M., &Ansari, M. I. (1995). Financial Development in Bangladesh- A Test of the McKinnon-Shaw Model. *Canadian Journal of Development Studies, 16*(2), 291-302. http://dx.doi.org/10.1080/02255189.1995.9669598

Atje, R., & Jovanovic, B. (1993). Stock markets and development. *European Economic Review*, *37*(2-3), 632-640. http://dx.doi.org/10.1016/0014-2921(93)90053-D

Central Bank of Nigerian (CBN). (2011). *Statistical Bulletins*. Abuja: Central Bank of Nigeria Publication.

El-Wassal, K. A. (2005). Understanding the Growth in Emerging Stock Markets. *Journal of Emerging Market Finance, 4*, 227-261. http://dx.doi.org/10.1177/097265270500400302

Ewah, S. O., Esang, A. E., & Bassey, J. U. (2009). Appraisal of Capital Market Efficiency on Economic Growth in Nigeria. *International Journal of Business and Management*, *4*(12), 219-225.

Goldsmith, R. W. (1969). *Financial Structure and Development*. New Haven, CT: Yale University Press.

Gupta, K. L. (1984). *Finance and Economic Growth in Developing Countries*. London: Croom Helm.

Gurley, J. G., & Shaw, E. S. (1955). Financial Aspects of Economic of Economic Development. *American Economic Review, 45*(4), 515-538.

Khan, Ashfaque, H. & Hasan, L. (1998). Financial Liberalization, Savings, and Economic Development in Pakistan. *Economic Development and Cultural Change, 46*(3), 581-597. http://dx.doi.org/10.1086/452359

Levine, R. (1997). Financial Development and Economic Growth: Views and Agenda. *Journal of Economic Literature, 35*(2), 688-726. http://dx.doi.org/10.1596/1813-9450-1678

Levine, R., & Zervos, S. (1996). Stock Market Development and Long-Run Growth. *World Bank Economic Review, 10*(2), 323-339. http://dx.doi.org/10.1596/1813-9450-1582

Levine, R., & Zervos, S. (1998). Stock Markets, Banks and Economic Growth. *American Economic Review, 88*(3), 537-558. http://dx.doi.org/10.1596/1813-9450-1690

McKinnon, R. I. (1973). *Money and Capital in Economic Development*. Washington DC: Brookings Institutions Press.

Nurudeen, A. (2009). Does Stock Market Development Raise Economic Growth? *The Review of Finance and Banking, 1*(1), 015-026.

Nyong, M. O. (1997). Capital Market Development and Long run Economic Growth: Theory, Evidence and Analysis. *First Bank Review,* 13-38. December.

Obadan, M. I. (1998). Capital Market and Nigeria's Economic Development. *Presidential address presented at the 1-day seminar of the Nigerian Economic Society at the Institute of International Affairs* on 21st January 1987.

Ouattara, B. (2004). *Foreign Aid and Fiscal Policy in Senegal*. Mimeo University of Manchester.

Oyejide, T. A. (1994). The Financial System and Economic Growth in the Context of Political Transition. *Central Bank of Nigeria Economic and Financial Review, 32*(3), 260-267.

Pesaran, B., & M. H. Pesaran (2010). *Time Series Econometrics using Microfit 5.0: A User's Manual*. Oxford University Press.

Pesaran, M. H., & Shin, Y. (1999). An Autoregressive Distributed Lag Modeling Approach to Cointegration Analysis. In S. Strom (Ed.), *Econometrics and Economic Theory in 20th Century: The Ragnar Frisch Centennial Symposium*, (Chapter 11, 371-413). Cambridge: Cambridge University Press.

Pesaran, M. H., Shin, Y., & Smith, R. J. (1996). Testing for the existence of a long run relationship. *DAE working paper, no. 9622*, University of Cambridge.

Pesaran, M. H., Smith, R. J., & Shin, Y. (2001). Bounds Testing Approaches to the Analysis of Level Relationships. *Journal of Applied Econometrics, 16*(3), 289-326. http://dx.doi.org/10.1002/jae.616

Seyyed, A. (2010). Emerging Stock Market Performance and Economic Growth. *American Journal of Applied Sciences, 7*(2), 265-269. http://dx.doi.org/10.3844/ajassp.2010.265.269

Shaw, E. S. (1973). *Financial Deepening in Economic Development*. New York: Oxford University Press.

Sudharshan, R. P., & Gupta, R. (2011). An Empirical Analysis of Stock Market Performance and Economic Growth: Evidence from India. *International Research Journal of Finance & Economics, 73*, 144-160.

Sule, O. K., & Momoh, O. C. (2009). The Impact of Stock Market Earnings on Nigeria Per Capita Income. *African Journal of Accounting, Economics Finance and Banking Research, 5*(5), 77-89.

Tobias, O. O., & Danson, K. (2011). Stock Market Performance and Economic Growth: Empirical Evidence from Kenya Using Causality Test Approach. *Advances in Management & Applied Economics, 1*(3), 153-196.

Vazakidis, A., & Adamopoulos, A. (2009). Stock Market Development and Economic Growth. *American Journal*

of Applied Sciences, 6(11), 19-32.